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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,101	05/08/2001	Terry Jacobson	5-12	2333

7590 07/27/2004

Docket Administrator (Room 3C-512)
Lucent Technologies Inc.
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EXAMINER	
PEREZ, JULIO R	

ART UNIT	PAPER NUMBER
2681	10

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/851,101	JACOBSON ET AL.	
	Examiner	Art Unit	
	Julio R Perez	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 5 are rejected under 35 U.S.C. 102(e) as being anticipated by applicant's submission of prior art Berenzweig (6584310).

Regarding claim 1, Berenzweig discloses, a method of providing authentication in a wireless communication system comprising the steps of: transmitting a first message to a first system from an Interoperability/Interworking Function (IIF), the first message comprising a mobile identifier for a subscriber of the first system and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system, the IIF being a separate entity from the first and second systems (col. 5, lines 20-35; Figs. 6,9, information is sent from the authentication interoperability function to one system to indicate further attempt to a different system); the AIF may be located together with the HLR or the Authentication Center of a home system or the VLR of the roamed system or by itself); receiving a second message from the first system at the IIF having shared secret data associated with the subscriber (col. 5, lines 32-34, the user

provides SSD to the AIF); generating an expected response at the IIF to a unique challenge using the shared secret data and an encryption algorithm (col. 5, lines 44-54, the challenge RAND is input together with the SSD in a common algorithm used throughout the system to produce an authentication response); and transmitting the expected response to the second system from the IIF (col. 5, lines 29-39, the authentication is forwarded to the roamed system).

Regarding claim 3, Berenzweig discloses, a logical network entity comprising: means for transmitting a first message to a first system, the first message comprising a mobile identifier for a subscriber of the first system and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system, the first system being different from the second system (col. 5, lines 20-35; Figs. 6,9, 10, there are two different systems: One IS-41 and one GSM; information is sent from the authentication interoperability function to one system to indicate further attempt to a different system); means for receiving a second message from the first system having shared secret data associated with the subscriber (col. 5, lines 32-34, the user provides SSD to the AIF); means for generating an expected response to a unique challenge using the shared secret data and an encryption algorithm (col. 5, lines 44-54, the challenge RAND is input together with the SSD in a common algorithm used throughout the system to produce an authentication response); and means for transmitting the expected response to the second system (col. 5, lines 29-39, the authentication is forwarded to the roamed system).

Regarding claim 5, Berenzweig discloses, a method of providing authentication in a wireless communication system comprising the steps of: receiving a first message at a first system from an Interoperability/Interworking Function (1IF), the first message comprising a mobile identifier for a subscriber of the first system and a second system indicator indicating that the subscriber is attempting to gain access to a second system that uses an authentication process different than an authentication process used by the first system, the IIF being a separate entity from the first and second systems (col. 5, lines 20-35; Figs. 6,9, 10, the AIF may be a stand-alone piece of equipment; information is sent from the authentication interoperability function to one system to indicate further attempt to a different system); determining shared secret data associated with the subscriber using the mobile identifier and the second system indicator (col. 5, lines 44-54, the challenge RAND is input together with the SSD in a common algorithm used throughout the system to produce an authentication response); and transmitting a second message from the first system having the shared secret data to the IIF for calculation by the IIF of an expected response (col. 5, lines 29-39 and lines 44-54, the challenge RAND is input together with the SSD in a common algorithm used throughout the system to produce an authentication response; the authentication is forwarded to the roamed system).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 4, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Berenzweig (6584310) in view of Brown et al. (5668875).

Regarding claims 2, 4, 6, Berenzweig teaches the limitations in claims 1, 3 and 5. Berenzweig does not explicitly disclose wherein the second system indicator includes at least one of the following: an electronic serial number set to a default or null value; a system capability parameter indicating that the subscriber is roaming in a GSM based wireless communication system; or a system access type parameter indicating that the subscriber is attempting to gain access in a GSM based wireless communication system.

However, the preceding limitation is well known in the art of telecommunications.

Brown et al. teach the implementation of a conversion or interworking functions that further provides the system with indication of that a subscriber is roaming into a GSM related system (col. 6, lines 47-64; col. 7, lines 34-65).

Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to implement the system as taught by Berenzweig with elements to identify that a system different from GSM system is entering the GSM system because it would provide the system with functions capable of accurately identifying the visiting systems and be able to authorize such systems more easily and efficiently.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio R Perez whose telephone number is (703) 305-8637. The examiner can normally be reached on 7:00 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JP
7/23/04

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